IN THE SPECIFICATION:

Please amend the Specification as follows:

[0002] Commercial vehicle transmissions typically include a manual or automated manual main gear box with an auxiliary box connected to the main gear box to provide additional gear ratios. For example, a commercial transmission providing eleven speeds may utilize an auxiliary gear box having three gear planes with two shift forks. Such an arrangement is shown in prior art Figure 1A. The transmission 10 includes a piston housing 12 having a first 14 and second 16 bores with first 18 and second 20 shift shafts respectively arranged within the bores 14 and 16. Ends of the shift shafts 18 and 20 respectively support first 22 and second 24 pistons. The first 22 and second 24 pistons separate the first 14 and second 16 bores into first 26, second 28, third 30 and fourth 32 chambers. The chambers 26, 28, 30, and 32 are pressurized to move the pistons 22 and 24 from left to right to selectively engage gears within the auxiliary box of the transmission 10.

[0005] The present invention provides an auxiliary gear box of a transmission including a piston housing having a first and a second bore. A first piston is arranged within the first bore and separates the first bore into first and second chambers. A first shift shaft extends ~~form~~ from the first piston and is connected to a first shift bore for selectively engaging a first auxiliary gear in response to actuation of the first piston. A second piston is arranged within the second bore separating the second bore into third and fourth chambers. A second shift shaft extends ~~form~~ from the second piston and is connected to a second shift fork for selectively engaging a second auxiliary gear in response to actuation of the second piston. In one example, this invention provides first, second and third actuators for selectively actuating the pistons. Unlike the prior art auxiliary gearbox shifting system, this invention only uses three actuators by fluidly connecting the first actuator to the first chamber. The second actuator is fluidly connected to the second and fourth chambers, and the third actuator is fluidly connected to the third chamber.

[0006] The exposed surface area of the piston in the chamber having the shift shaft is less than the exposed surface area of the piston on the chamber opposite the shift shaft. As a result, if both chambers of a bore are pressurized, the piston will move in the direction of the chamber having the shift shaft since a greater force will be generated on the piston in the chamber without the shift shaft. In one example, the second and fourth chambers include the portions of shift shafts. Designing the auxiliary box shifting arrangement with this relationship in mind enables one actuator ~~in a typically~~ from the typical four actuator system to be eliminated. Accordingly, the cost of the transmission would be reduced by eliminating a solenoid and reducing the size and machining of the

piston housing.

[0017] The solenoids A, B and C are connected to a pressurized fluid source 52 such as pressurized air for supplying the pressurized air to the chambers 26, 28, 30 and 32. For the configuration shown, the first shift shaft 18 extends from the range piston 22 into the second chamber 28. The second shift shaft 20 extends from the splitter piston 24 into the ~~floor~~ fourth chamber 32. The exposed surface area of the pistons 22 and 24 is greater in the first 26 and third 30 chambers than in the second 28 and fourth 32 chambers. For example, the ratio of exposed surface area of the pistons between the first 26 and third 30 chambers and the second 28 and fourth 32 chambers may be approximately 2:1. As a result, if both chambers of a bore are simultaneously pressurized, the piston will move in the direction of the chamber having the shift shaft since the force generated on the piston on the side opposite the shift shaft will be greater than the force generated on the piston on the side with the shift shaft. This relationship may be accounted for in the design process of the auxiliary box shifting configuration to eliminate one of the solenoids.